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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,019	07/30/2003	Mark D. Chuey	LEAR 04116 PUS	7763
34007	7590	06/02/2005	EXAMINER	
BROOKS KUSHMAN P.C. / LEAR CORPORATION			NGUYEN, NAM V	
1000 TOWN CENTER			ART UNIT	
TWENTY-SECOND FLOOR			PAPER NUMBER	
SOUTHFIELD, MI 48075-1238			2635	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Best Available Copy

## Office Action Summary

Application No.

10/630,019

Applicant(s)

CHUEY, MARK D.

Examiner

Nam V. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 16-33 is/are rejected.
- 7) ☒ Claim(s) 14 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/22/05; 12/16/04 + 6 other IDS statements
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The application of Chuey for a “programmable appliance remote control” filed July 30, 2003 has been examined.

Claims 1-33 are pending.

#### ***Drawings***

This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

The drawings are objected to under 37 CFR 1.83(a) because they fail to label boxes (530 to 536 and 130) in Figure 19 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

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be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

The disclosure is objected to because of the following informalities: on page 11 line 12 and page 12 line 25, "illustrated in Figure 6" should be "illustrated in Figure 7".

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The current abstract using phrase "the present invention" is implied and should be avoided. See MPEP 608.01(b).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8, 10-13, 16-22, 24, 26-29 and 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsui (Pub. No. 2002/0163440).

Referring to claims 1, 16, 26-27, Tsui discloses a programmable universal transmitter as recited in claims 1, 16, 26-27. See Figures 1-7 and respective portions of the apparatus and method.

Tsui discloses a system (i.e. a transmitter-receiver system) for wirelessly activating an appliance (130) (i.e. a utility device) (page 2, paragraph 0020; see Figure 1), the appliance (130) responding to one of a plurality of transmission schemes (i.e. plurality of formats and frequencies) (page 2, paragraph 0021-0022; see Figures 1-2 and 4), the system comprising:

a transmitter (248) (i.e. a RF circuit) operative to transmit a radio frequency activation signal (110) (i.e. a signal having a predetermined transmission frequency and a unique data transmission format) (page 2, paragraph 0021-0027; see Figures 1 to 3B);

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at least one user activation input (226) (i.e. a plurality of switches S1 to S4), each activation input identifying a channel (page 3, paragraph 0029; page 4, paragraph 0036 to 000039; see Figures 1 to 3B);

a programming input (230) (i.e. code switch) (page 3, paragraph 0030; see Figure 2);

memory (222) (i.e. ROM) holding data describing a plurality of rolling code transmission schemes (i.e. rolling code settings) associated with a rolling code mode (i.e. a global rolling code) and a plurality of fixed code transmission schemes (i.e. code setting), at least one fixed code transmission scheme associated with each of at least one fixed code mode (i.e. a global 'N' code) (page 2 paragraph 0025 to 0026; page 3 paragraph 0035 to page 4 paragraph 0040; see Figure 2); and

control logic (210) (i.e. a CPU) in communication with the transmitter (248), the at least one user activation input (226), the programming input (230) and the memory (222) (see Figure 2; page 2 paragraph 0025), for each channel the control logic (210) maintaining a channel mode set initially to a rolling code mode (i.e. a global rolling code), the channel mode changing to one of the at least one fixed code mode (i.e. global 'N' code) if the channel is trained to a fixed code received from the programming input (230) (page 5 paragraph 0042 to 0047; see Figures 4 and 5), the control logic (210) in response to an assertion of the user activation input (230) associated with the channel generating and transmitting an activation signal (110) based on each transmission scheme (i.e. global 'N' code setting) associated with the mode maintained for the channel (page 4 paragraph 0037 to page 5 paragraph 0041; see Figures 3-5).

Referring to Claim 2, Tsui discloses the system of claim 1, wherein the at least one fixed code mode (i.e. global 'N' code) is a single fixed code mode (i.e. a fixed code pulse modulation signal) (page 3 paragraph 0029 to 0030; page 4 paragraph 0038).

Referring to Claims 3 and 17-18, Tsui discloses the system of claims 1 and 16, wherein the at least one fixed code mode (i.e. global 'N' code) is a plurality of fixed code modes (i.e. a fixed code pulse modulation signal, pulse width modulation and frequency shift keying signal) (page 3 paragraph 0029 to 0030; page 4 paragraph 0036 to 0040).

Referring to Claims 4 and 19, Tsui discloses the system of claims 1 and 16, wherein the fixed code has a code size and wherein the control logic (210) determines the fixed code channel mode based on the code size of the fixed code (i.e. a global "N" code setting in EEPROM) (page 2 paragraph 0025; page 3 paragraph 0030; page 4 paragraph 0037; see Figures 2-4).

Referring to Claims 5 and 20, Tsui discloses the system of claims 1 and 16, wherein the control logic (210) determines the channel mode as one of the fixed code modes through guess-and-test user interaction (learning sequence) (page 6 paragraph 0048 to 0049; see Figures 5 and 6).

Referring to Claims 6 and 22, Tsui discloses the system of claims 1 and 16, wherein the channel mode may be reset to rolling code mode (i.e. global rolling code) (page 4 paragraph 0040 to 0041; page 5 paragraph 0045 to 0047; see Figures 4 and 5).

Referring to Claims 8, 24 and 33, Tsui discloses the system of claims 1, 16 and 26, wherein the control logic (210) generates and transmits activation signals based on a popularity of schemes (i.e. a desired frequency range), thereby reducing an average activation latency time (page 3 paragraph 0028 to 0032; page 4 paragraph 0041 to 0042; see Figure 1-5).

Referring to Claim 10, Tsui discloses the system of claim 1, wherein the at least one activation input (S1) is a plurality of activation inputs (S1 to S4) (page 3 paragraph 0029; page 4 paragraph 0039 to 0040; see Figures 2 and 3).

Referring to Claim 11, 21 and 28-29, Tsui discloses the system of claims 10, 16 and 26, wherein each of the plurality of activation inputs (i.e. S1 to S4) comprises a switch and the user programming input comprises the same plurality of switches (i.e. S1 to S4) (page 3 paragraph 0029 and 0035 to 0040; see Figures 2 to 4).

Referring to Claims 12 and 32 Tsui discloses the system of claims 1 and 26, wherein the fixed code (i.e. global 'N' code) is parallelly received (i.e. input by matrix of code switches 230) (page 2 paragraph 0025; page 4 paragraph 0037; see Figures and 3).

Referring to Claim 13, Tsui discloses the system of claim 1, wherein the fixed code (i.e. global 'N' code) is serially received (i.e. input by push button switches S1 to S4) (page 2 paragraph 0025; page 4 paragraph 0036 to 0040; see Figures 2 and 3).



***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsui (Pub. No. 2002/0163440) and in view of Chiloyan et al. (US# 6,008,735) as applied to Claims 1, 16 and 26.

Referring to Claims 7, 23 and 31, Tsui discloses the system of Claims 1, 16 and 26, however, Tsui did not explicitly disclose further comprising a data port operative to download data describing at least one scheme into the memory.

In the same field of endeavor of a programmable remote control system, Chiloyan et al. teach that a data port (24) (i.e. a data link interface) operative to download data describing at least one scheme (i.e. code sets) into the memory (14) (column 4 lines 21 to 52; column 5 lines 24 to 46; see Figure 1) in order to add additional code sets.

One of ordinary skilled in the art recognizes the need to have a data link interface in a programmable remote control unit of Chiloyan et al. in programmable universal transmitter of Tsui because Tsui suggests it is desired to provide that the programmable universal transmitter learns additional code to store in non-volatile memory from external utility devices (page 6

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paragraph 0048 to 0049) and Chiloyan et al. teach that a remote control unit has a data link interface to download an additional code sets to store in the memory in order to update code set easily. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to have a data link interface in a programmable remote control unit of Chiloyan et al. in programmable universal transmitter of Tsui with the motivation for doing so would have been to provide an additional way to update and to load data into memory from external devices.

Claims 9, 25 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsui (Pub. No. 2002/0163440) (hereinafter Tsui'0163440) and in view of Tsui (US# 6,441,719) (hereinafter Tsui'719) as applied to Claims 1, 16 and 26.

Referring to Claims 9, 25 and 30, Tsui'0163440 discloses the system of Claims 1, 16 and 26, however, Tsui'0163440 did not explicitly disclose further comprising wherein the memory holds a different counter value for each of the plurality of rolling code transmission schemes.

In the same field of endeavor of a remote control signaling system, Tsui'719 teaches that wherein the memory (102) (i.e. a memory of a security console 20) holds a different counter value (i.e. value of the variable security code) for each of the plurality of rolling code transmission schemes (i.e. device rolling code data) (column 6 lines 42 to 53; column 9 line 64 to column 10 line 34; see Figures 1-5) in order to calculating the variable security code correctly for signal transmissions to the signaling devices.

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At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need for storing each value of the variable security code for each device rolling code data in memory of a security console of Tsui'719 in a programmable universal transmitter of Tsui'0163440 because using a memory to store different value for each of the plurality of rolling code transmission schemes would improve transmission of correct rolling code for each utility device.

***Allowable Subject Matter***

Claims 14-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Referring to claims 14-15, the following is a statement of reasons for the indication of allowable subject matter: the prior art fail to suggest limitations wherein, in response to an assertion of the user activation input, at least one pair of fixed code activation signals based on the same fixed code transmission scheme is transmitted, one fixed code activation signal in each pair based on a reversal or an inverse of the fixed code.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Okayasu et al. (US# 6,043,753) disclose a remote control operated locking/unlocking system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 571-272-3061. The examiner can normally be reached on Mon-Fri, 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

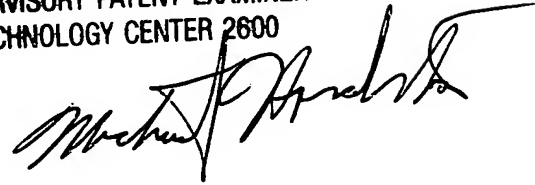
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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nam Nguyen  
May 27, 2005



MICHAEL HORABIK  
SUPERVISORY PATENT EXAMINER  
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